



# ***STIC Search Report***

***EIC 1700***

**STIC Database Tracking Number: 148402**

**TO: Elizabeth Mulvaney  
Location: REM 10B77  
Art Unit : 1774  
March 29, 2005**

**Case Serial Number: 10/651627**

**From: Usha Shrestha  
Location: EIC 1700  
REMSEN 4B28  
Phone: 571/272-3519  
usha.shrestha@uspto.gov**

## **Search Notes**

=> fil reg

FILE 'REGISTRY' ENTERED AT 16:06:46 ON 29 MAR 2005  
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=> d his

FILE 'HCAPLUS' ENTERED AT 13:40:01 ON 29 MAR 2005

L1 0 S US20040137188/PN  
L2 0 S US20040137188/PN,AP,PRN  
L3 140 S LINDHOLM E?/AU  
L4 45 S CINCOTTA L?/AU  
L5 62 S MINNS R?/AU  
L6 20 S TAKIFF L?/AU  
L7 0 S L3 AND L4 AND L5 AND L6  
L8 0 S L3 AND L4  
L9 1 S L3 AND L6  
L10 1 S L3 AND L5 AND L6  
L11 0 S L4 AND L5 AND L6  
L12 2 S L5 AND L6  
L13 0 S L4 AND L6  
L14 0 S L4 AND L5  
L15 0 S L4 AND L1  
L16 0 S L1 AND L5  
L17 2 S L9 OR L10 OR L12  
SEL RN

FILE 'REGISTRY' ENTERED AT 13:47:46 ON 29 MAR 2005

L18 21 S E1-E21

FILE 'LREGISTRY' ENTERED AT 13:54:08 ON 29 MAR 2005

L19 STR  
L20 STR L19  
L21 STR L20

FILE 'REGISTRY' ENTERED AT 14:05:29 ON 29 MAR 2005

L22 STR L19  
L23 0 S L22  
L24 0 S L22 FUL  
L25 1 S 61-73-4/RN  
E C16H18N4/MF  
E C16H18N3/MF  
L26 42 S E26  
L27 567 S C16H18N4/MF  
L28 24 S L26 AND 3/NR  
E 116331-39-6/RN

L29 1 S E3  
 L30 347 S L27 AND 3/NR  
 L31 0 S L30 AND PHENOAZ?  
 L32 8 S L30 AND PHENAZ?  
 L33 2 S L32 AND 2,8-PHENAZINEDIAMINE  
 E 54668-98-3/RN  
 L34 1 S E3

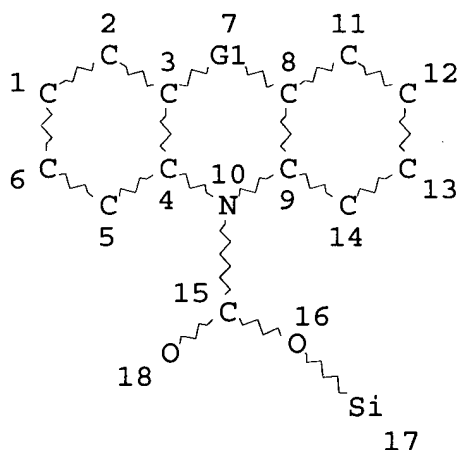
FILE 'HCAPLUS' ENTERED AT 15:52:44 ON 29 MAR 2005

L35 31 S L25/DP  
 L36 0 S L29/DP  
 L37 0 S L34/DP  
 L38 2 S L35 AND (SILIC? OR SILAN? OR SI OR SILOXAN?)  
 L39 3 S L35 AND (?SILIC? OR ?SILAN? OR SI OR ?SILOXAN?)  
 L40 3 S L38 OR L39

FILE 'REGISTRY' ENTERED AT 16:06:46 ON 29 MAR 2005

=> d que stat l24

L22 STR



VAR G1=O/S/SE/C/N

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

L24 0 SEA FILE=REGISTRY SSS FUL L22

100.0% PROCESSED 372 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

=&gt; d que 135

L25 1 SEA FILE=REGISTRY ABB=ON PLU=ON 61-73-4/RN  
L35 31 SEA FILE=HCAPLUS ABB=ON PLU=ON L25/DP

=&gt; d que 136

L29 1 SEA FILE=REGISTRY ABB=ON PLU=ON 116331-39-6/RN  
L36 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L29/DP

=&gt; d que 137

L34 1 SEA FILE=REGISTRY ABB=ON PLU=ON 54668-98-3/RN  
L37 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L34/DP

=&gt; fil hcap

FILE 'HCAPLUS' ENTERED AT 16:07:35 ON 29 MAR 2005  
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=&gt; d l40 1-3 ibib abs hitstr hitind

L40 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:459482 HCAPLUS

DOCUMENT NUMBER: 141:387788

TITLE: Preparation and photochromism of Keggin type  
heteropoly/methylene blue supermolecular  
compound

AUTHOR(S): Xu, Tian; Jin, Surong

CORPORATE SOURCE: School of Science, Wuhan University of  
Technology, Wuhan, 430070, Peop. Rep. China  
Wuhan Ligong Daxue Xuebao (2003), 25(7),  
28-30

CODEN: WLDXAV; ISSN: 1671-4431

PUBLISHER: Wuhan Ligong Daxue Jikanshe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB A new photochromic compound was synthesized from heteropoly acid

(such as **silicotungstic** acid) and methylene blue and characterized by elemental anal., IR, and UV-Vis spectroscopy. The heteropolyanions with a Keggin structure was kept unchanged. Photochromism studies showed that the electron transfer took

place

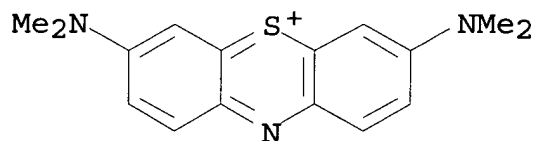
from the organic mols. to the heteropolyanions.

IT 61-73-4DP, Methylene blue, compound with **silicotungstic** acid

(preparation and photochromism of keggin type blue supermol.)

RN 61-73-4 HCAPLUS

CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

CC 78-8 (Inorganic Chemicals and Reactions)

IT 61-73-4DP, Methylene blue, compound with **silicotungstic** acid 12027-38-2DP, **Silicotungstic** acid (H4SiW12O40), compound with methylene blue

(preparation and photochromism of keggin type blue supermol.)

IT 61-73-4, Methylene blue 12027-38-2, **Silicotungstic** acid (H4SiW12O40)

(preparation and photochromism of keggin type blue supermol.)

L40 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:805904 HCAPLUS

DOCUMENT NUMBER: 139:308991

TITLE: Inks for ink jet printers for light- and water-resistant images

INVENTOR(S): Udagawa, Reiko

PATENT ASSIGNEE(S): Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
	-----	----	-----	-----
	JP 2003292858	A2	20031015	JP 2002-134726

2002

0401

PRIORITY APPLN. INFO.:

JP 2002-134726

2002

0401

AB The inorg. ions of acid dyes and basic dyes are substituted with hydrophilic organic ions to give amphipathic dyes and mixed with **aminoalkoxysilanes**, butyral resins, water-soluble solvents, and additives to prepare inks. Thus, Auramine O, Rhodamine B,

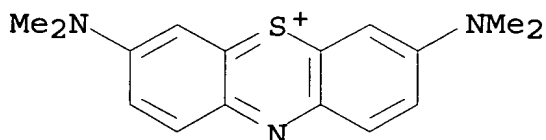
and methylene blue were treated with Na p-toluenesulfonate and used in yellow, magenta, and cyan inks, resp.

IT **61-73-4DP**, Methylene blue, reaction products with sodium toluenesulfonate

(jet printing inks containing amphipathic dyes for light and water resistance)

RN 61-73-4 HCAPLUS

CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

IC ICM C09D011-00

ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)  
ST light water resistant jet ink amphipathic dye;  
**aminoalkoxysilane** butyral resin amphipathic dye ink  
IT **Silanes**  
(alkoxy, amino-; jet printing inks containing amphipathic  
dyes for  
light and water resistance)  
IT **Silanes**  
(amino, alkoxy; jet printing inks containing amphipathic dyes  
for  
light and water resistance)  
IT **61-73-4DP**, Methylene blue, reaction products with sodium  
toluenesulfonate 657-84-1DP, Sodium p-toluenesulfonate,  
reaction  
products with dyes  
(jet printing inks containing amphipathic dyes for light and  
water  
resistance)  
IT 87-18-3, p-tert-Butylphenyl salicylate 919-30-2, 3-  
**Aminopropyltriethoxysilane**  
(jet printing inks containing amphipathic dyes for light and  
water  
resistance)

L40 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:50584 HCAPLUS  
DOCUMENT NUMBER: 134:117187  
TITLE: Nanocomposite coatings  
INVENTOR(S): Fischer, Hartmut Rudolf; Batenburg, Lawrence  
Fabian; Meinema, Harmen Anne; Hogerheide,  
Marinus Pieter; Rentrop, Cornelis Hermanus  
Arnoldus  
PATENT ASSIGNEE(S): Nederlandse Organisatie voor  
Toegepast-Natuurwetenschappelijk Onderzoek  
TNO, Neth.  
SOURCE: PCT Int. Appl., 16 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.
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WO 2001004050	A1	20010118	WO 2000-NL479

2000

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,  
CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,  
TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,  
AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,  
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE,  
SN, TD, TG

NL 1012587 C2 20010116 NL 1999-1012587

1999

0713

NL 1013373 C2 20010424 NL 1999-1013373

1999

1022

EP 1194374 A1 20020410 EP 2000-946535

2000

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EP 1194374 B1 20031008  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, SI, LT, LV, FI, RO  
JP 2003504493 T2 20030204 JP 2001-509670

2000

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AT 251596 E 20031015 AT 2000-946535

2000

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ES 2200894 T3 20040316 ES 2000-946536

2000

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US 6815489

B1

20041109

US 2002-30285

2002

0513

PRIORITY APPLN. INFO.:

NL 1999-1012587

A

1999

0713

NL 1999-1013373

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1999

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WO 2000-NL479

W

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AB The invention relates to a method for preparing a composition for coating,

wherein a layered, inorg. filler is subjected to an ion exchange with a modifier, which modifier comprises at least two ionic groups, which groups are separated from each other by at least

four

atoms, and wherein the modified filler, together with a polymer, is dispersed in a diluent. A typical coating composition was

manufactured

by stirring 20 g EXM 757 clay with 6.1 g methylene blue 30 min at 60° in water and mixing 1.02 g modified clay with waterborne Neorez R986 (35% solids polyurethane-polycarbonate

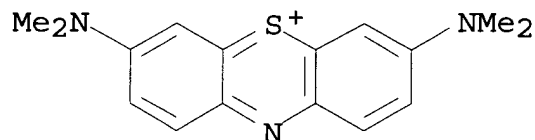
diol

composition).

IT 61-73-4DP, Methylene blue, reaction products with clay (nanocomposite coatings containing ion-exchanged layered fillers)

RN 61-73-4 HCAPLUS

CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

IC ICM C01B033-44  
ICS C08K009-04; C08J003-20  
CC 42-5 (Coatings, Inks, and Related Products)  
IT Alkyd resins  
Aminoplasts  
Epoxy resins, uses  
Phenolic resins, uses  
Polyesters, uses  
Polyethers, uses  
Polyolefins  
Polysiloxanes, uses  
Polyurethanes, uses  
(nanocomposite coatings containing ion-exchanged layered fillers)  
IT 61-73-4DP, Methylene blue, reaction products with clay  
321140-88-9DP, EXM 757, ion-exchanged with dyes  
(nanocomposite coatings containing ion-exchanged layered fillers)  
IT 84-86-6DP, 4-Amino-1-naphthalenesulfonic acid, reaction products with methylene blue, sodium aminoundecanoate, and layered clay  
64667-38-5DP, reaction products with methylene blue, aminonaphthalenesulfonic acid, and layered clay 291537-33-2P, Aluminum tri-sec-butoxide-3-glycidylloxypropyltrimethoxysilane-methyltrimethoxysilane copolymer  
(nanocomposite coatings containing ion-exchanged layered fillers)  
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT